REMARKS

Claim 1 has been amended to require that the at least one chemical agent forms a crystalline solid, and that the permitting step produces chemical agent that is in crystalline form in the blend which includes the polymer. The specification identifies the chemical agents as preferably being crystalline solids at page 5, line 19; page 6, line 6 (a particular example); page 8, line 20; and in the Title. The specification provides examples demonstrating the formation of a powder material where the chemical agent is in crystalline form together with the polymer (see page 17, line 1, and page 19, line 8).

Claim 11 has been amended to more correctly refer to the blend, rather than the polymer. In addition, claims 11-13 and 30 have been amended to refer to agitating or masticating. Agitation and mastication are referred to in the alternative throughout the application, and the claims have been amended to reflect this. Note particularly page 9, line 12; page 9, line 26; page 12, line 10; page 17, lin 17.

New claim 31 has been added. The specification at page 17, lines 15-17, indicates that the chemical agent is a solid at room temperature and has a melting temperature that is in excess of the melting temperature for the SCF assisted mastication process.

The application now includes claims 1-31. The check accompanying the RCE and this amendment includes the fee for the additional dependent claim.

The applicant notes with appreciation that the drawings filed October 3, 2003 have been accepted.

As noted previously, co-pending application 10/677,746 has not yet issued as a patent; therefore, action with respect to the provisional rejection for obviousness type double patenting is deferred.

Claims 1-30 have been rejected as being anticipated by U.S. Patent 5,766,522 to Daly. Claims 1-30 have also been rejected as being anticipated by U.S. Patent 5,548,004 to Mandel.

The undersigned has noted with appreciation the Examiner's commentary with respect to the Daly and Mandel references, and has made an amendment to claim 1 which overcomes both rejections and significantly distinguishes the claimed invention from either Daly and Mandel.

In particular, in the present invention, when the chemical agent associates with the polymer, it drops out of the supercritical fluid phase to form a crystalline solid that is associated with the polymer. Agitation or mastication essentially results in fracturing the crystalline agent into small pieces which pull polymer chains with them such that a homogenous blend of small crystalline agent particles coated with polymer are produced.

In sharp contrast, neither Daly nor Mandel show or suggest that a crystalline particle is formed in the polymer in the blend. Quite the contrary. In both Daly and Mandel there is a desire to have the chemical agent and the polymer be a liquid that coats a solid in the vessel which does not dissolve in the supercritical fluid. With respect to Mandel, the vessel contains a particle coated with liquid polymer and chemical agent, all of which is in supercritical fluid. That is, Mandel describes a dispersion, and the diesperssion has to be depressurized through a valve or nozzle to let the polymer freeze or harden around the solid material and eventually make a polymer coated article. Likewise, in Daly the powder coating ingredients are used in a continuous extrusion process; however, there is no suggestion in Daly to have a chemical agent assume a crystalline form as is described and claimed in the present application.

Further, the undersigned notes that a number of the dependent claims have not been specifically addressed by the Examiner. In particular, claims 24-27 discuss the use of a solubilizing agent. As discussed in page 8, at lines 8 et seq., many chemical agents which form crystalline solids are not soluble in SCFs. The patent application provides working examples of how to address this difficulty in the practice of the invention. In sharp contrast, Daly and Mandel never discuss this use of a solubilizing agent, and this likely due to the fact that Daly and Mandel are not focused on making a homogenous blend of crystalline solid/polymer material as is described and claimed in the present application. Likewise claims 11-13 and 30 are focused on the agitation or mastication contemplated by the present invention. The Examiner's reference to the agitation device 36 of Mandel fails to anticipate the claims for the same reasons that claim 1 is not anticipated (Mandel does not show a crystalline solid chemical agent associated with a polymer). Furthermore, Mandel does not use the steel balls (claim 12) or brabender device (claim 13), and does not make a powder (claim 30) as required in the present application. Notably, the passages referenced by the Examiner in Mandel relate to simply mixing the materials together. Additional dependent claims also further distinguish the claimed invention from Daly and Mandel.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1-31 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041.

Respectfully submitted,

Michael E. Whitham
Reg. No. 32,635

Whitham, Curtis & Christofferson, P.C.
11491 Sunset Hills Road, Suite 340
Reston, VA 20190

Tel. (703) 787-9400
Fax. (703) 787-7557

Customer No.: 30743